- PROC CONTENTS
- PROC MEANS
- PROC UNIVARIATE
- PROC FREQ
- PROC CORR
- PROC PLOT DAN GPLOT

PROC CONTENTS

PROC CONTENTS DATA = *SAS-data-set <option>*;
RUN;

PROC CONTENTS memberikan informasi tentang SAS data set.

option:

noprint : hasilnya tidak ditampilkan.

out= : hasilnya dibuat dalam data set.

dll.

PROC MEANS

```
PROC MEANS DATA = SAS-data-set <statistics-keyword(s)>;
VAR numvar1 numvar2 …;
CLASS charvar1 charvar2 …; (mengelompokan berdasarkan)
OUTPUT OUT=nama-data<statistics-keyword(s)>;
RUN;
```

Default ***statistics-keyword*** adalah **N, MEAN, STD, MIN**, dan **MAX**.

statistics-keyword :

VAR, MEDIAN, NOPRINT, MAXDEC, Q1, Q3, P1, P5, P10, P25, P50, P75, P90, P95, P99, KURTOSIS, SKEWNESS, dll.

Kurtosis = jarak antara panjang kurva

Skewness = penjuluran

```
PROC MEANS DATA=lib.class;
RUN;

PROC MEANS DATA=lib.class;
  VAR UTS UAS;
RUN;

PROC MEANS DATA=lib.class;
  CLASS JK;
  VAR UTS UAS;
RUN;
```

PROC UNIVARIATE

PROC UNIVARIATE DATA=*SAS-data-set<options>*;

CLASS variable-1 <(v-options)> <variable-2 <(v-options)>> </KEYLEVEL=value1 | (value1 value2)>;

FREQ variable;

HISTOGRAM <variables></options>;

ID variables;

OUTPUT <**OUT=**SAS-data-set><keyword1=names ...keywordk=names><percentile-options>;

PPPLOT <variables></options>;

PROBPLOT <variables></options>;

QQPLOT <variables></options>;

VAR variables;

Proc univariate = nganalisis per variabel

```
PROC UNIVARIATE DATA=lib.class;
RUN;

PROC UNIVARIATE DATA=lib.class;
  VAR UTS UAS;
RUN;

PROC UNIVARIATE DATA=lib.class;
  VAR UTS UAS;
  HISTOGRAM UTS UAS;
RUN;
```

PROC FREQ

```
PROC FREQ DATA=SAS-data-set <statistics-keyword>;
TABLES request</option>;
RUN;
```

Request	Equivalent to
tables A*(B C);	tables A*B A*C;
tables (A B)*(C D);	tables A*C B*C A*D B*D;
tables (A B C)*D;	tables A*D B*D C*D;
tables A – – C;	tables A B C;
tables (A – – C)*D;	tables A*D B*D C*D;

```
DATA HTWT;
INPUT SUBJEK GENDER $ TINGGI BOBOT;
DATALINES;
1 L 68.5 155
2 P 61.2 99
3 P 63.0 115
4 L 70.0 205
5 L 68.6 170
6 P 65.1 125
7 L 72.4 220
;
RUN;
```

```
PROC FREQ DATA=HTWT;
   TABLES GENDER;
RUN;

PROC FREQ DATA=HTWT;
   TABLES GENDER / NOCUM;
RUN;

PROC FREQ DATA=HTWT;
   TABLES GENDER / NOCUM
   NOPERCENT;
RUN;
```

PROC CORR

```
PROC CORR DATA = SAS-data-set<option>;
   BY variables;
   FREQ variable;
   ID variables;
   PARTIAL variables;
   VAR variables;
   WEIGHT variable ;
```

```
PROC CORR DATA=lib.class;
RUN;

PROC CORR DATA=lib.class;
  VAR UTS UAS NILAI;
RUN;
```

PROC PLOT dan GPLOT

```
PROC PLOT DATA=SAS-data-set;
PLOT vertikal*horizontal;
PLOT vertikal*horizontal=“karakter”</option>;
RUN;
QUIT;

PROC GPLOT DATA=SAS-data-set;
PLOT vertikal*horizontal;
PLOT2 vertikal*horizontal=“karakter”</option>;
RUN;
QUIT;
```

```
data generate;
    do i=0 to 100 by 2;
        x = RANNOR(1);
       y = 2.54+3.83*x+RANNOR(1);
       output;
    end;
run;

proc plot data=generate;
    plot y*x;
run;
quit;
```